

CURRENT CLAIMS

1 1. A method of inducing expression of at least one gene in a cultured cell,
2 comprising the steps of:
3 culturing at least one cell;
4 contacting said cell with a transcription factor decoy oligonucleotide sequence
5 directed against a nucleotide sequence encoding a shear stress response element; and
6 determining the expression of said gene in said cell.

1 2. The method of claim 1, wherein said oligonucleotide comprises a terminal
2 phosphothiorate moiety and a phosphodiester backbone.

1 3. The method of claim 1, wherein said oligonucleotide passes cell
2 membranes and accumulates in the nuclear compartment of said cell.

1 5. The method of claim 1, wherein said cultured cell is selected from the
2 group consisting of an epithelial cell and an endothelial cell.

1 6. The method of claim 4, wherein said cultured cell is selected from the
2 group consisting of renal cortical cell, renal fibroblast cell, hepatocyte, pancreatic islet,
3 renal interstitial cell, parathyroid cell, thyroid cell, pituitary cell, ovarian cell and
4 testicular cell.

1 7. The method of claim 1, wherein said cultured cell is grown in two
2 dimensional culture.

1 8. The method of claim 1, wherein said shear stress response element is
2 selected from the group consisting of GAGACC and GGTCTC.

1 9. The method of claim 1, wherein the gene encodes a protein selected from
2 the group consisting of megalin, cubulin, erythropoietin and 1-a-hydroxylase.

1 10. The method of claim 1, wherein the concentration of said oligonucleotide
2 is from about 10 nM to about 10 mM.

1 13. A method of claim 1, wherein said cultured cell is grown in a rotating wall
2 vessel.